# Problems in the Use of Tranquilizing Drugs

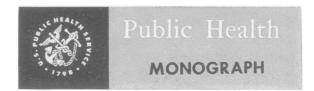
The tranquilizing drugs, such as chlorpromazine and reserpine, have been heralded as opening a new era in psychiatry.

Although these drugs may have such a potential, many facts are needed to assess the public health and social consequences that may arise from their widespread use. This monograph points to and discusses some major problems posed by availability of these drugs to the psychiatric profession and other branches of medical practice and the types of research needed to assess the effects of these drugs, particularly on mental hospital and outpatient psychiatric practice.

The tranquilizing drugs are being used on persons of all ages to treat not only a wide spectrum of psychiatric disorders but also hypertensive vascular disease and many other conditions. Their significant action is their ability to reduce motor activity, disturbed behavior, tension, and anxiety without producing sleep. The tranquilizing effect has been reported to be of value in the treatment of hospitalized psychotics by diminishing disturbed behavior without preventing patients from continuing to take part in psychotherapy, occupational, recreational and other forms of therapy. However, much research is needed to determine the immediate and long-range effect of the drugs both in psychiatric and nonpsychiatric patients. It is also necessary to establish appropriate dosages in relation to the various characteristics of the patient, such as age, sex, diagnosis, duration of illness, or general physical state.

Because of the tranquilizing properties of the drugs, information is needed on their psychological effects and the characteristics of the individuals in whom these effects are likely to occur. In this connection, the results of several recent studies show a significant incidence of severe depression, with suicidal tendencies in some in-

stances, in persons being treated for hypertensive vascular disease with reserpine and other rauwolfia products. This constitutes a major contraindication to the indiscriminate and un-



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The accompanying note summarizes the principal points discussed in Public Health Monograph No. 41, published concurrently with this issue of Public Health Reports. The author is chief of the Biometrics' Branch of the National Institute of Mental Health, National Institutes of Health, Public Health Service.

Readers wishing the data in full may purchase copies of the monograph from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. A limited number of free copies are available to official agencies and others directly concerned on specific request to the Public Inquiries Branch of the Public Health Service. Copies will be found also in the libraries of professional schools and of the major universities and in selected public libraries.

Kramer, Morton: Public health and social problems in the use of the tranquilizing drugs. Public Health Monograph No. 41 (Public Health Service Publication No. 486). 32 pages. Illustrated. U. S. Government Printing Office, Washington, D. C., 1956.

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supervised use of rauwolfia preparations in persons with essential hypertension.

#### **Effect on Mental Hospital Populations**

Because of the magnitude of the problem of the hospitalized mentally ill, hospital administrators and public health, welfare, and other governmental officials are interested in finding some way either to reduce first admission rates to these hospitals, to effect a higher turnover of patients, or to keep readmission rates low and thus eventually to decrease the size of the resident populations. The tranquilizing drugs possess some of the necessary properties of an agent that could achieve such results. However, much more information is needed about the processes in society that lead to hospitalization and about the factors in the hospital and in the community that lead to release before any major portion of observed differences can be attributed to the tranquilizing drugs.

### Effect on First Admission Rates

Data show that between 1940 and 1950 there had already been striking variations—and, in several instances, reductions—in age-specific first admission rates to State mental hospital systems. It is emphasized that there is a need for much careful epidemiological and social science research to illuminate the facts about "paths to the mental hospital" as well as "the barriers" hospital administrators place between the hospital and the community before one can determine what part the tranquilizing drugs may be playing in the reduction of admissions to mental hospitals.

#### Effect on Release Rates

Data are presented to emphasize the complexities in interpreting release rates from mental hospitals and also to demonstrate that even prior to the advent of the tranquilizing drugs there had been striking changes in these rates. Questions are raised as to whether increases in release rates that have been occurring over the years are due to (a) more intensive use of various psychiatric therapies, (b) differences in the kind of risk being admitted now as compared to years ago, (c) changes in attitude of staff toward level of improvement expected in

patients prior to release, (d) administrative factors and staff and patient organization within the hospital, or (e) changes in the community's attitude and that of the patient's family toward the mental hospital and the mentally ill.

Because of the large number of variables, well-designed experimental studies are necessary to evaluate therapies singly and in combination with each other and with various ancillary programs. In such studies there must be carefully defined diagnostic groups of patients, appropriate control groups, carefully specified therapeutic plans and staffing patterns, and specific objective criteria for evaluating results of treatment and for determining condition at time of release. The questions about the importance of the tranquilizing drugs on the outcome of treatment emphasize quite sharply the need for clarification of what constitutes psychiatric treatment, and as to what are the objectives of treatment within the hospital setting. If hypotheses with respect to the effectiveness of the tranquilizing drugs in accomplishing the goals of hospital treatment are to be tested, then it is essential that experiments and studies be devised that permit comparison of the effectiveness of a treatment method without use of the drugs with its effectiveness when the drugs are used.

#### Implications for Staffing Patterns

Not only have the numbers of personnel in mental hospitals been inadequate in relation to the number of patients but the turnover of personnel has also been relatively high. The milieu now made possible in the wards of mental hospitals following the introduction of the tranquilizing agents, namely, a marked reduction in or elimination of motor excitement in patients and in the reduction or elimination of the use of seclusion and restraint, raises serious questions about how existing staffs will have to be retrained and how staffing patterns should be changed, as well as how many additional or fewer personnel will be required.

## Followup Studies

The need for carefully designed followup studies is urgent to determine the relationship of

diagnosis, sex, age, length of hospitalization, therapy, and the socioenvironmental factors encountered by patients in the extrahospital world to relapse or successful readjustment. The tranquilizing drugs add further complications. For example: How should do age levels used in the hospital be modified up to time of release? When the patient is released, on what dosage should he be maintained, if any? What problems does the use of these drugs pose for the family? What information should the family be given? What resources in the community are needed to follow up these patients adequately so as to prevent serious complications from developing in the patient, to detect complications when they have developed, and to take appropriate steps to safeguard the patient, his family, and the community as well as to facilitate readjustment of the patient to the extrahospital world?

#### **Effect on Outpatient Medical Practice**

Uses of the tranquilizing drugs have suggested the possibility that relatively inexpensive

agents are available that will make it possible to treat many types of psychiatric disorders on an outpatient basis. It has also been suggested that these drugs may reduce the need for psychiatrists in isolated communities where the general practitioner can now treat some of the milder forms of mental disorders. However, the widespread use of these drugs in our current state of knowledge concerning their immediate and long-range effects might also produce conditions that could tax seriously the limited psychiatric resources of the Nation. Some of the possible problems that these drugs may create are considered in relation to the psychiatric manpower of the Nation and the availability of outpatient and other community psychiatric services. It is suggested that administrators of community mental health programs scrutinize carefully the current organization of psychiatric outpatient and inpatient services to determine how they must be modified and reorganized to meet the new demands that may be placed on them by the advent of the age of pharmacotherapy in the psychiatric disorders.

## **Advisory Council on Vocational Rehabilitation**

Mrs. Spencer Tracy, Russel W. Brothers, and Chester W. Haddan were appointed in May 1956 to 4-year terms on the National Advisory Council on Vocational Rehabilitation.

The 12-member council reviews applications submitted by private, nonprofit, or public organizations seeking Federal funds for partial support of research and demonstration projects or of special facilities concerned with vocational rehabilitation problems of nationwide significance.

Mrs. Tracy, president and director of the John Tracy Clinic of Los Angeles, has had long experience with problems of the deaf and hard of hearing. She has been associated with many organizations working on behalf of the handicapped and is the author

of numerous articles dealing with hearing impairments.

Mr. Brothers, secretary and treasurer of the M. P. Brothers Co., of Nashville, Tenn., is chairman of the Tennessee Governor's Committee on Employment of the Physically Handicapped and has long taken an active interest in the Tennessee vocational rehabilitation program.

Mr. Haddan, a specialist in the artificial limb field, is president of the Gaines Orthopedic Appliances Co. of Denver, Colo. He is also a member of the prosthetics research board of the National Research Council, the committee on artificial limbs of the American Medical Association's council on physical medicine, and the Colorado Governor's Committee on Employment of the Physically Handicapped.